#### FORM 6-K

#### SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

For the month of June 2013 No. 6

#### TOWER SEMICONDUCTOR LTD.

(Translation of registrant's name into English)

Ramat Gavriel Industrial Park
P.O. Box 619, Migdal Haemek, Israel 23105
(Address of principal executive offices)

Indicate by check mark whether the registrant files or will file annual reports under cover Form 20-F or Form 40-F.

Form 20-F x Form 40-F £

Indicate by check mark whether the registrant by furnishing the information contained in this Form is also thereby furnishing the information to the Commission pursuant to Rule 12g3-2(b) under the Securities Exchange Act of 1934.

Yes £ No x

On June 19, 2013, the registrant announced to Service High Volume, Commercial Infrared Markets.	

## **SIGNATURES**

Pursuant to the requirements of the Securities Exchange Act of 1934, the registrant has duly caused this report to be signed on its behalf by the undersigned, thereunto duly authorized.

## TOWER SEMICONDUCTOR LTD.

Date: June 19, 2013 By: /s/ Nati Somekh

Name: Nati Somekh Title: Corporate Secretary

#### **NEWS ANNOUNCEMENT**

#### FOR IMMEDIATE RELEASE

TowerJazz to Service High Volume, Commercial Infrared Markets

Markets predicted by Maxtech International to reach >\$5B by 2015

NEWPORT BEACH, Calif., June 19, 2013 – TowerJazz, the global specialty foundry leader today announced it will be the wafer manufacturer for infrared sensing and camera devices using its proven specialty process technologies. In addition to traditional infrared applications, TowerJazz will facilitate expansion into other consumer markets such as gaming, personal security, and application driven platforms, market segments which are already well served by the company.

The advanced CMOS-based process at TowerJazz's US location is a viable, commercially sustainable foundry offering to support its commercial as well as its aerospace and defense customers.

"This development is a natural fit for TowerJazz. Our leading edge CMOS for custom imaging products and our expertise in bringing specialty processing and MEMS to volume manufacturing fits extremely well with the proven capabilities of our customer," said David Howard, Executive Director and Fellow, TowerJazz.

"Combined external and internal investments will expand our existing fabrication as well as facilitize an annex which will be used for certain unique processes. This will be the first and only large scale pure play foundry capable of producing fully integrated sensors. The application space is expected to grow substantially, enabling a new and additional significant revenue stream to the company," said Russell Ellwanger, Chief Executive Office, TowerJazz.

#### About TowerJazz

Tower Semiconductor Ltd. (NASDAQ: TSEM, TASE: TSEM), its fully owned U.S. subsidiary Jazz Semiconductor Ltd., and its fully owned Japanese subsidiary TowerJazz Japan, Ltd., operate collectively under the brand name TowerJazz, the global specialty foundry leader. TowerJazz manufactures integrated circuits, offering a broad range of customizable process technologies including: SiGe, BiCMOS, Mixed-Signal/CMOS, RFCMOS, CMOS Image Sensor, Power Management (BCD), and MEMS capabilities. TowerJazz also provides a world-class design enablement platform that enables a quick and accurate design cycle. In addition, TowerJazz provides (TOPS) Technology Optimization and development Process Services to IDMs and fabless companies that need to expand capacity. TowerJazz offers multi-fab sourcing with two manufacturing facilities in Israel, one in the U.S., and one in Japan. For more information, please visit www.towerjazz.com.

#### Safe Harbor Regarding Forward-Looking Statements

This press release includes forward-looking statements, which are subject to risks and uncertainties. Actual results may vary from those projected or implied by such forward-looking statements. A complete discussion of risks and uncertainties that may affect the accuracy of forward-looking statements included in this press release or which may otherwise affect TowerJazz's business is included under the heading "Risk Factors" in Tower's most recent filings on Forms 20-F, F-3, F-4 and 6-K, as were filed with the Securities and Exchange Commission (the "SEC") and the Israel Securities Authority and Jazz's most recent filings on Forms 10-K and 10-Q, as were filed with the SEC, respectively. Tower and Jazz do not intend to update, and expressly disclaim any obligation to update, the information contained in this release.

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